

## **REMARKS**

### **I. Status of the Claims**

Claims 15-69 are pending in the application. Of those claims, claims 61-69 have been withdrawn from further consideration as being directed to non-elected inventions. Office Action at 2. Thus, claims 15-60 have been examined on the merits.

### **II. Rejections of Independent Claim 15 under 35 U.S.C. § 103(a)**

In the Office Action, claims 15-43, 47-58, and 60 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over International Publication No. WO 00/66510 to Lyons et al. ("Lyons"). Office Action at 3. Further, claims 15, 30-37, 39-41, 44-46, and 51-60 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 5,833,747 to Bleakley et al. ("Bleakley") in combination with International Publication No. WO 02/16511 to Johns et al. ("Johns"). Id. at 5. Of the claims included in those claim rejections, claim 15 is the only independent claim. Applicants respectfully traverse the rejections of independent claim 15 under 35 U.S.C. § 103(a) based on the Lyons, Bleakley, and Johns references, because those references, regardless of whether they are viewed individually or as a whole, fail to render independent claim 15 *prima facie* obvious for at least the reasons outlined in more detail herein.

#### **A. Claim Rejection under § 103(a) based on Lyons**

Applicants' independent claim 15 has been rejected under 35 U.S.C. § 103(a) based on Lyons. In particular, the rejection statement asserts that Lyons "discloses a

composition comprising PCC composition, such as aragonite or rhombohedral, and a kaolin composition, which has a shape factor of less than 25 and a steepness of greater than 38.” Office Action at 3 (citing Lyons at pp. 5, 8, and 18). The rejection statement concedes that Lyons does not disclose “identical ranges,” but nevertheless asserts that Lyons discloses “‘overlapping’ ranges,” and further, that “overlapping ranges have been held to establish prima facie obviousness.” Id. (citation omitted). The Office Action has apparently relied on those assertions in purported support of the claim rejection under § 103(a) based on Lyons.

Applicants respectfully traverse the claim rejection under § 103(a) based on Lyons, because Lyons fails to render the subject matter recited in independent claim 15 *prima facie* obvious. In particular, independent claim 15 is not *prima facie* obvious based on Lyons, at least because (1) contrary to the rejection statement’s assertion, Lyons does not disclose “overlapping ranges,” and (2) Lyons, insofar as it might relate to the question of patentability here, points away from modification of its disclosed compositions in a manner that would hypothetically render the subject matter recited in independent claim 15 *prima facie* obvious.

Under 35 U.S.C. § 103(a), several basic factual inquiries must be made in order to evaluate whether a patent claim is obvious. According to the M.P.E.P., obviousness is a question of law based on these factual inquiries. § 2141(II) (citing KSR Int’l Co. v. Teleflex Inc., 127 S. Ct. 1727, 82 U.S.P.Q.2d (BNA) 1385 (2007), and relying on the framework established by Graham v. John Deere Co., 383 U.S. 1, 17, 148 U.S.P.Q. (BNA) 459, 467 (1966)). In particular, the Graham factual inquiries create a four-part

framework for evaluating whether a patent claim is obvious. Graham, 383 U.S. at 17.

Those factual inquiries are as follows:

- (A) Determining the scope and contents of the prior art;
- (B) Ascertaining the differences between the prior art and the claims at issue;
- (C) Resolving the level of ordinary skill in the pertinent art; and
- (D) Evaluating evidence of secondary considerations.

Id. Following the guidance of the U.S. Supreme Court, the M.P.E.P. advises that the question of obviousness must be resolved on the basis of these factual determinations.

M.P.E.P. § 2141(II).

The M.P.E.P. also provides guidelines for making these factual determinations. For example, the M.P.E.P. cautions that in order to avoid impermissible hindsight reasoning, these factual determinations must be made with respect to “the time the invention was made.” § 2141.01(III). Moreover, the M.P.E.P. cautions that when “determining the differences between the prior art and the claims, the question [of obviousness] is not whether the differences themselves would have been obvious, but [rather, it is] whether the claimed invention as a whole would have been obvious.” § 2141.02(I). Indeed, when considering the prior art, [a] prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention.” § 2143.03(VI) (second emphasis added).

Once the Graham factual inquiries have been resolved, it must be determined whether a claim is *prima facie* obvious. § 2141(III). Following the guidance of the above-outlined framework, the M.P.E.P. cautions that in order to establish a *prima facie* case of obviousness, “the examiner must step backward in time and into the shoes

worn by the hypothetical 'person of ordinary skill in the art' when the invention was unknown and just before it was made." § 2142. Further, "the examiner must then make a determination whether the claimed invention 'as a whole' would have been obvious at that time to that person," and further, that "[k]nowledge of applicant's disclosure must be put aside in reaching this determination" because "impermissible hindsight must be avoided and a legal conclusion must be reached on the basis of the facts gleaned from the prior art"; not on the basis of Applicants' disclosure. Id.

Based on this guidance, the M.P.E.P. advises "[i]f a proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious." § 2143.01(VI). In other words, if the prior art teaches away from a proposed modification, then the prior art does not render a claim *prima facie* obvious.

Returning to the rejection of independent claim 15 under § 103(a) based on Lyons, Lyons does not render that claim *prima facie* obvious when viewed in light of the guidance of the M.P.E.P. Applicants' independent claim 15 is directed to a pigment composition including, *inter alia*, "a kaolin clay with a shape factor greater than or equal to about 25 . . . ." Applicants respectfully submit that contrary to the rejection statement's unsupported assertion, Lyons does not expressly disclose a kaolin having a shape factor within the recited range.

Applicants note first that the rejection statement fails to identify any express disclosure in Lyons that supports its implicit assertion that Lyons discloses a kaolin having a shape factor "greater than or equal to about 25," as recited in independent

claim 15. Indeed, the Lyons reference itself does not expressly disclose a kaolin having a shape factor in the recited range. Applicants respectfully submit that the only kaolin shape factor expressly disclosed is 16, as described in Examples 1-6 at pp. 25-32. Applicants respectfully note that a shape factor of 16 falls below the range recited in independent claim 15 (i.e., “a shape factor greater than or equal to about 25”). For at least this reason, Lyons fails to disclose a shape factor range that overlaps the shape factor range recited in independent claim 15. Thus, independent claim 15 is not *prima facie* obvious based on the rejection statement’s asserted “overlapping ranges” theory.

In addition to not expressly disclosing a shape factor within the range recited in independent 15, Lyons teaches away from a shape factor in the recited range of greater than or equal to about 25. In particular, kaolin clay having a shape factor greater than or equal to about 25 is generally known to artisans skilled in the art as being “platey” kaolin clay, as outlined in the present application at p. 11, lines 10-11. Lyons, in contrast, teaches a paper coating composition produced from “blocky” kaolin clay. It is well known to artisans skilled in the art that “blocky” kaolin clay generally has a relatively low shape factor, such as, for example, a shape factor of less than 20, as outlined at p. 3, lines 28-30, of the present application.

Applicants respectfully note that Lyons, in addition to not disclosing platey kaolin clays having high shape factors, distinguishes its own disclosure from disclosures relating to platey kaolin clays. Referring to p. 4, lines 1-9 of Lyons, Lyons distinguishes its disclosure from prior art relating to platey kaolin by disclosing that “[t]he present invention which employs a composition comprising a steep particle size distribution (“psd”), engineered, blocky rather than a platey kaolin clay unexpectedly produces a

combination of sheet brightness and gloss which is better than that reported in [the] prior art . . . .” (Emphasis added). Thus, viewing Lyons as a whole, as is required for a proper obviousness analysis, a skilled artisan would understand that Lyons teaches away from substituting relatively higher shape factor-“platey” kaolin clays for its disclosed, lower shape factor-“blocky” kaolin clays. For at least this additional reason, independent claim 15’s recitation of shape factors greater than or equal to about 25 is not *prima facie* obvious based on Lyons.

For at least the reasons outlined above, Applicants respectfully submit that independent claim 15 is not *prima facie* obvious based on Lyons. Therefore, Applicants respectfully request reconsideration and withdrawal of the rejection of independent claim 15 under § 103(a) based on 103(a) based on Lyons.

**B. Claim Rejection under § 103(a) based on Bleakley and Johns**

Applicants’ independent claim 15 was rejected under 35 U.S.C. § 103(a) based on Bleakley in combination with Johns. Office Action at 5. In particular, the rejection statement asserts that Bleakley “discloses a composition comprising a PCC (aragonite) composition and a kaolin (encompasses kaolinite) composition, where the PCC has [the] defined sizes,” and the “[k]aolin composition has a shape factor of larger than 30.” Id. The rejection statement concedes that Bleakley does not disclose “the steepness factor of the kaolin and the GE brightness of the PCC and kaolin.” Id. The rejection statement asserts, however, “it would have been obvious . . . to choose the steepness factor as applicant set forth in the instant application, motivated by the fact that [Johns], also drawn to a kaolin product, disclose[s] that the combination of the defined values of

steepness factor and shape factor give, in a paper made from the kaolin product, a beneficially enhanced combination of brightness and high porosity and thereby enhanced printability . . . .” Id. at 5-6.

Applicants respectfully traverse the § 103(a) rejection of independent claim 15 based on the rejection statement’s hypothetical combination of Bleakley and Johns at least because (1) contrary to the rejection statement’s assertion, Bleakley does not expressly disclose a kaolin having a shape factor of 30, and (2) an artisan skilled in Bleakley’s art relating paper coating pigments would not have looked to Johns’s art relating to super-calendered (i.e., uncoated) paper for improving coated paper. Thus, one of ordinary skill in the art, when considering the Bleakley and Johns references as a whole, would not have arrived in the rejection statement’s proposed, hypothetical manner at the subject matter recited in independent claim 15.

The Bleakley reference is directed to paper coating compositions including a combination of precipitated calcium carbonate and kaolin clay. Bleakley discloses precipitated calcium carbonates having particular shapes and particle size distributions, and kaolin clays having particular aspect ratios and particle size distributions combined in a manner to achieve a desired paper coating effect. The Johns reference, in contrast, is directed to a super-calendered paper filler for uncoated paper; not a paper coating pigment. Thus, Bleakley and Johns are not related to the same end use, and thus, it is not necessarily the case that beneficial characteristics of the end products achieved through the use of particular compositions disclosed in the references will translate between end uses. In other words, merely because a particular composition achieves desired results in a paper-filler application does not necessarily mean that use

of the same (or similar) compositions will necessarily result in those desired results in a paper coating pigment composition, as the rejection statement implies.

Moreover, while Bleakley relates to a combination of precipitated calcium carbonate and kaolin, Johns expressly relates only to kaolins without being combined with calcium carbonate. Thus, Bleakley must necessarily take into consideration how precipitated calcium carbonate and kaolin react with one another, while Johns may be solely concerned with how kaolin by itself reacts when used as a paper filler. Indeed, an artisan skilled in Bleakley's art relating to paper coatings could not necessarily presume that a benefit to paper fillers obtained based on kaolin that is not combined with precipitated calcium carbonate, would necessarily be obtained in its compositions for coated paper pigments. Thus, the significant differences between the disclosures of these references dictate against a reasonable expectation of success stemming from the rejection statement's proposed, hypothetical combination. Therefore, Bleakley and Johns, viewed either individually or as a whole, fail to render the subject matter recited in Applicants' independent claim 15 obvious. As a result, it appears that instead of relying on the teachings of the prior art references as a whole, the rejection statement is improperly relying on impermissible hindsight reasoning and Applicants' own disclosure to assert in an unsupported fashion that independent claim 15 is purportedly obvious.

In addition, Applicants respectfully note that Bleakley, in contrast to the rejection statement's assertion, does not expressly disclose kaolin having a shape factor larger than 30. Furthermore, neither Bleakley nor Johns expressly discloses the use of rhombohedral calcium carbonate.



For at least the reasons outlined above, Bleakley and Johns, regardless of whether they are viewed individually or as a whole, fail to render independent claim 15 *prima facie* obvious. Therefore, Applicants respectfully request reconsideration and withdrawal of the rejection of independent claim 15 under § 103(a) based on Bleakley and Johns.

**III. Claim Rejection under § 103(a) based on Lyons and Bleakley**

Claims 44-46 and 59 were rejected under 35 U.S.C. § 103(a) based on Lyons in combination with Bleakley. Office Action at 4. Each of claims 44-46 and 59 depends from independent claim 15. Therefore, each of those dependent claims should be patentably distinguishable from Lyons for at least the same reasons as independent claim 15. Further, Bleakley, even when combined with Lyons, does not result in all of the subject matter recited being disclosed or rendered *prima facie* obvious. For at least these reasons, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 44-46 and 59 under § 103(a) based on Lyons and Bleakley.

**IV. Non-Statutory, Obviousness-Type Double Patenting Rejection**

Claims 15, 16, 28, 41, 44-46, 51, and 52 were rejected based on an assertion of non-statutory, obviousness-type double patenting, as allegedly being unpatentable over claims 44-47, 50, and 51 of co-pending U.S. Application No. 10/538,012 to Skuse et al. ("Skuse"). Office Action at 7. In particular, the rejection statement asserts that claims 15, 16, 28, 41, 44-46, 51, and 52 of the present application "are not patentably distinct" from claims 44-47, 50, and 51 of Skuse, purportedly because "both applications

are drawn to a composition comprising a kaolin composition and a calcium carbonate composition.” Id.

Applicants respectfully traverse this rejection at least for the reason that the rejection statement has not satisfied the minimum requirements for a proper rejection based on obvious-type double patenting. According to the M.P.E.P., “the analysis employed in an obviousness-type double patenting rejection parallels the guidelines for analysis of a 35 U.S.C. [§] 103 obviousness determination,” “except that the patent [(or patent application)] principally underlying the rejection is not considered prior art.” § 804(II)(B)(1) (citations omitted). Thus, the proper analysis under § 103 outlined previously herein must be followed, except that “[w]hen considering whether the invention defined in a claim of an application would have been an obvious variation of the invention defined in the claim of a patent, the disclosure of the patent may not be used as prior art.” Id.

Applicants respectfully submit that the rejection statement has failed to conduct a proper analysis for making an obviousness-type double patenting rejection. For example, the rejection statement has failed to (1) make proper findings of fact with respect to the claims of the present application and the claims of Skuse, and (2) articulate any rationale in purported support concerning why the differences between the claims of Skuse and the subject matter recited in the claims of the present application would have been obvious to a person having ordinary skill in the art. See M.P.E.P. § 2141(III) (explaining the requirements for a proper analysis under § 103). Rather, the rejection statement has merely improperly pointed to the disclosure of Skuse in purported support of the rejection, asserting that “both applications are drawn

to a composition comprising a kaolin composition and a calcium carbonate composition.” Office Action at 7. Other than this conclusory statement, the rejection statement fails to provide any rationale in purported support of how the present claims are allegedly obvious based on the claims of Skuse.

Applicants respectfully submit that claims 15, 16, 28, 41, 44-46, 51, and 52 of the present application and claims 44-47, 50, and 51 of Skuse are patentably distinct. Independent claim 15 of the present application recites precipitated calcium carbonate but not particulate ground calcium carbonate, while, in contrast, claims 44-47, 50, and 51 of Skuse recite particulate ground calcium carbonate. Moreover, independent claim 15 of the present application recites precipitated calcium carbonate having particular shape characteristics. In contrast, claims 44-47, 50, and 51 of Skuse do not. For at least these reasons, the compositions recited in the claims of the present application and those recited in the claims of Skuse are patentably distinct. The rejection statement has not provided any rationale in support of why at least these differences would have purportedly been obvious to a person having ordinary skill in the art.

For at least the above-outlined reasons, Applicants respectfully submit that the obviousness-type double patenting rejection of claims 15, 16, 28, 41, 44-46, 51, and 52 of the present application is improper. Therefore, Applicants respectfully request reconsideration and withdrawal of the obviousness-type double patenting rejection of those claims based on Skuse.

**V. Conclusion**

For at least the reasons set forth above, Applicants respectfully submit that independent claim 15 should be allowable. Claims 16-60 depend from allowable independent claim 15. Thus, those dependent claims should be allowable for at least the same reasons independent claim 15 is allowable. Therefore, Applicants respectfully request reconsideration of the present application, reconsideration and withdrawal of the claim rejections, and allowance of all of pending claims 15-60.

If the Examiner believes that a telephone conversation might advance prosecution of this application, the Examiner is cordially invited to call Applicants' undersigned attorney at (404) 653-6559.

Applicants respectfully submit that the Office Action contains a number of assertions concerning the related art and the claims. Regardless of whether those assertions are addressed specifically herein, Applicants respectfully decline to automatically subscribe to them.

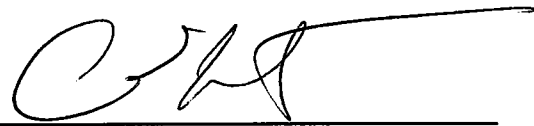
Please grant any extensions of time required to enter this Request for Reconsideration and charge any additional required fees to our Deposit Account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: September 16, 2008

By: \_\_\_\_\_



Christopher T. Kent  
Reg. No. 48,216